

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Charles Griggers (Reg. No. 47,283) on 10/19/09.

The application has been amended as follows:

Claims Listing:

1. (Currently Amended) A method for printing information at a remote location, comprising:

maintaining a previous configuration of a printer resources pool as a default printing device resource pool;

establishing a network connection at a remote location;

receiving a list of printing devices communicatively coupled to a print service available to a mobile-computing device and configuring the printer resources pool to include the list of printing devices;

accepting and installing at the mobile-computing device a latest version of a common print driver from the print service;

requesting a print device context responsive to a printer selected from the list of printing devices;

using an application resident on the mobile-computing device to render information to the print device context, wherein the application generates a plurality of device commands responsive to the information to be printed;

forwarding the device commands to the print service, wherein the print service renders the device commands against the printer; and

upon termination of the network connection at the remote location, restoring ~~a~~the default-printing device resource pool as the list of printing devices that are available to be selected.

2. (Original) The method of claim 1, further comprising:

intercepting the device commands;

generating an intermediate format; and

rendering the intermediate format before the step of forwarding.

3. (Canceled)

4. (Original) The method of claim 1, further comprising:

receiving a printer status from the print service.

5. (Original) The method of claim 4, further comprising:

forwarding the printer status to the application.

6. (Currently Amended) A computer-readable ~~storage medium~~ memory having stored thereon an executable instruction set, the instruction set, when executed by a processor, directs the processor to perform a method comprising:

maintaining a previous configuration of a printer resources pool as a default printing device resource pool, the printing device resource pool comprising a list of printing devices that are available to be selected by the mobile-computing device;

sensing by the processor a change of connection status between a mobile-computing device and a wireless access device coupled to a local area network;

establishing by the processor a communication session with a print service accessible via the local area network when the change of connection status indicates that the mobile-computing device has established a communication session with the wireless access device, wherein during the communication session, the printer resources pool is reconfigured to include a list of printing devices communicatively coupled to the print service and the mobile-computing device uses a printer driver configured to generate a generic device context responsive to a designated printer coupled to the print service;

using the printer driver to intercept graphics device commands generated by an application operative on the mobile-computing device;

forwarding the graphics device commands by the processor to the print service, wherein the print service renders the graphics device commands against the designated

printer, wherein during the communication session, the mobile-computing device receives a common driver from the print service; and

upon termination of the network connection at the remote location, restoring a the default-printing device resource pool as the list of printing devices that are available to be selected.

7. (Currently Amended) The computer-readable ~~storage-medium~~ memory of claim 6, wherein using the printer driver comprises generating an intermediate format and rendering the intermediate format before forwarding the graphics device commands.

8. (Canceled)

9. (Currently Amended) The computer-readable ~~storage-medium~~ memory of claim 6, further comprising:

receiving a printer status from the print service.

10. (Currently Amended) The computer-readable ~~storage~~-memory of claim 6, further comprising:

forwarding the printer status to the application.

11. (Currently Amended) The computer-readable ~~storage-medium~~ memory of claim 6, further comprising:

displaying information indicative of a printing device available to the mobile-computing device.

12. (Currently Amended) The computer-readable ~~storage~~-memory of claim 6, further comprising:

reporting information indicative of the condition of pending print tasks.

13. (Currently Amended) The computer-readable ~~storage~~-memory of claim 6, further comprising:

identifying a default device for print requests originating within the mobile-computing device.

14. (Currently Amended) The computer-readable ~~storage~~-memory of claim 6, further comprising:

reconfiguring the mobile-computing device in accordance with indicia of the default device when the change of connection status indicates that the communication session with the wireless access device has terminated.

15. (Currently Amended) A mobile-computing device, comprising:

means for maintaining a previous configuration of a printer resources pool as a default printing device resource pool, the printing device resource pool comprising a list of printing devices that are available to be selected by the mobile-computing device;

means for responding to a change of connection status between a mobile-computing device and a wireless access device communicatively coupled to a print service;

means for establishing a communication session with the print service when the change of connection status indicates that the mobile-computing device has established a connection with the wireless access device, wherein during the communication session, the printer resources pool is reconfigured to include a list of printing devices communicatively coupled to the print service and the mobile-computing device uses a printer driver configured to generate a generic device context responsive to a printer coupled to the print service and wherein the means for establishing a communication session further comprises means for receiving a common driver;

means for intercepting graphics device commands generated by an application operative of the mobile-communication device;

means for forwarding the graphics device commands to the print service, wherein the print service renders the graphics device commands in accordance with the printer;
and

means for restoring ~~a~~the default-printing device resource pool as the list of printing devices that are available to be selected upon termination of the network connection at the remote location.

16. (Original) The mobile-computing device of claim 15, wherein the means for establishing a communication session with the print service comprises an application program.

17. (Original) The mobile-computing device of claim 15, wherein the means for intercepting graphics device commands comprises a printer driver.

18. (Canceled)

19. (Original) The mobile-computing device of claim 15, further comprising:
print task initialization means for receiving a user-selected input indicative of content desired to be printed by the printing device.

20. (Original) The mobile-computing device of claim 19, further comprising:
monitoring means for observing the condition of pending print tasks.

21. (Currently Amended) A mobile-computing apparatus, comprising:
a processor;
a memory coupled to the processor having stored therein a driver comprising:
a communication interface including:

an application interface for communicatively coupling the driver to
an application executing within the processor; and

a print service interface for communicatively coupling the driver to a
print service wirelessly coupled to the mobile-computing apparatus,
wherein the mobile-computing apparatus receives the driver from the print
service;

an interceptor coupled to the communication interface, the interceptor configured
to identify and forward graphics device commands issued by the application; and

a formatter coupled to the interceptor, wherein when the formatter is enabled, the
formatter renders information desired to be printed from the mobile-communication
device to an intermediate format communicated to the print service, wherein the
application interface is enabled to maintain a previous configuration of a printer
resources pool as a default printing device resource pool, the printing device resource
pool comprising a list of printing devices that are available to be selected by the mobile-
computing apparatus, and to restore a-the default-printing device resource pool as a list
of printing devices that are available to be selected upon termination of a network
connection with the print service.

22. (Original) The apparatus of claim 21, wherein when the formatter is disabled,
the interceptor forwards the graphics device commands to the print service for rendering
via a printer driver compatible with a select printer coupled to the print service.

23. (Original) The apparatus of claim 21, further comprising:
a message handler configured to receive indicia of a printer status.

24. (Original) The apparatus of claim 23, wherein the message handler is
configured to forward the printer status via the application interface to the application.

The following is an examiner's statement of reasons for allowance:

Regarding claim 1, prior art of record is silent to teaching a method for printing
information at a remote location, comprising:

maintaining a previous configuration of a printer resources pool as a default
printing device resource pool;

establishing a network connection at a remote location;

receiving a list of printing devices communicatively coupled to a print service
available to a mobile-computing device and configuring the printer resources pool to
include the list of printing devices;

accepting and installing at the mobile-computing device a latest version of a
common print driver from the print service;

requesting a print device context responsive to a printer selected from the list of
printing devices;

using an application resident on the mobile-computing device to render information to the print device context, wherein the application generates a plurality of device commands responsive to the information to be printed;

forwarding the device commands to the print service, wherein the print service renders the device commands against the printer; and

upon termination of the network connection at the remote location, restoring the default-printing device resource pool as the list of printing devices that are available to be selected.

Regarding claim 6, prior art of record is silent to teaching a computer-readable memory having stored thereon an executable instruction set, the instruction set, when executed by a processor, directs the processor to perform a method comprising:

maintaining a previous configuration of a printer resources pool as a default printing device resource pool, the printing device resource pool comprising a list of printing devices that are available to be selected by the mobile-computing device;

sensing by the processor a change of connection status between a mobile-computing device and a wireless access device coupled to a local area network;

establishing by the processor a communication session with a print service accessible via the local area network when the change of connection status indicates that the mobile-computing device has established a communication session with the wireless access device, wherein during the communication session, the printer resources pool is reconfigured to include a list of printing devices communicatively

coupled to the print service and the mobile-computing device uses a printer driver configured to generate a generic device context responsive to a designated printer coupled to the print service;

using the printer driver to intercept graphics device commands generated by an application operative on the mobile-computing device;

forwarding the graphics device commands by the processor to the print service, wherein the print service renders the graphics device commands against the designated printer, wherein during the communication session, the mobile-computing device receives a common driver from the print service; and

upon termination of the network connection at the remote location, restoring the default-printing device resource pool as the list of printing devices that are available to be selected.

Regarding claim 15, prior art of record is silent to teaching a mobile-computing device, comprising:

means for maintaining a previous configuration of a printer resources pool as a default printing device resource pool, the printing device resource pool comprising a list of printing devices that are available to be selected by the mobile-computing device;

means for responding to a change of connection status between a mobile-computing device and a wireless access device communicatively coupled to a print service;

means for establishing a communication session with the print service when the change of connection status indicates that the mobile-computing device has established a connection with the wireless access device, wherein during the communication session, the printer resources pool is reconfigured to include a list of printing devices communicatively coupled to the print service and the mobile-computing device uses a printer driver configured to generate a generic device context responsive to a printer coupled to the print service and wherein the means for establishing a communication session further comprises means for receiving a common driver;

means for intercepting graphics device commands generated by an application operative of the mobile-communication device;

means for forwarding the graphics device commands to the print service, wherein the print service renders the graphics device commands in accordance with the printer;
and

means for restoring the default-printing device resource pool as the list of printing devices that are available to be selected upon termination of the network connection at the remote location.

Regarding claim 21, prior art of record is silent to teaching a mobile-computing apparatus, comprising:

a processor;

a memory coupled to the processor having stored therein a driver comprising:

a communication interface including:

an application interface for communicatively coupling the driver to an application executing within the processor; and

a print service interface for communicatively coupling the driver to a print service wirelessly coupled to the mobile-computing apparatus, wherein the mobile-computing apparatus receives the driver from the print service;

an interceptor coupled to the communication interface, the interceptor configured to identify and forward graphics device commands issued by the application; and

a formatter coupled to the interceptor, wherein when the formatter is enabled, the formatter renders information desired to be printed from the mobile-communication device to an intermediate format communicated to the print service, wherein the application interface is enabled to maintain a previous configuration of a printer resources pool as a default printing device resource pool, the printing device resource pool comprising a list of printing devices that are available to be selected by the mobile-computing apparatus, and to restore the default-printing device resource pool as a list of printing devices that are available to be selected upon termination of a network connection with the print service.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WEN W. HUANG whose telephone number is (571)272-7852. The examiner can normally be reached on 10am - 6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew D. Anderson can be reached on (571) 272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/W. W. H./
Examiner, Art Unit 2618

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